

Figure A1. Coarse-scale rugosity of the eight Main Hawaiian Islands at 6 m spatial resolution to a depth of 22 m. Values are relative from zero to 100.

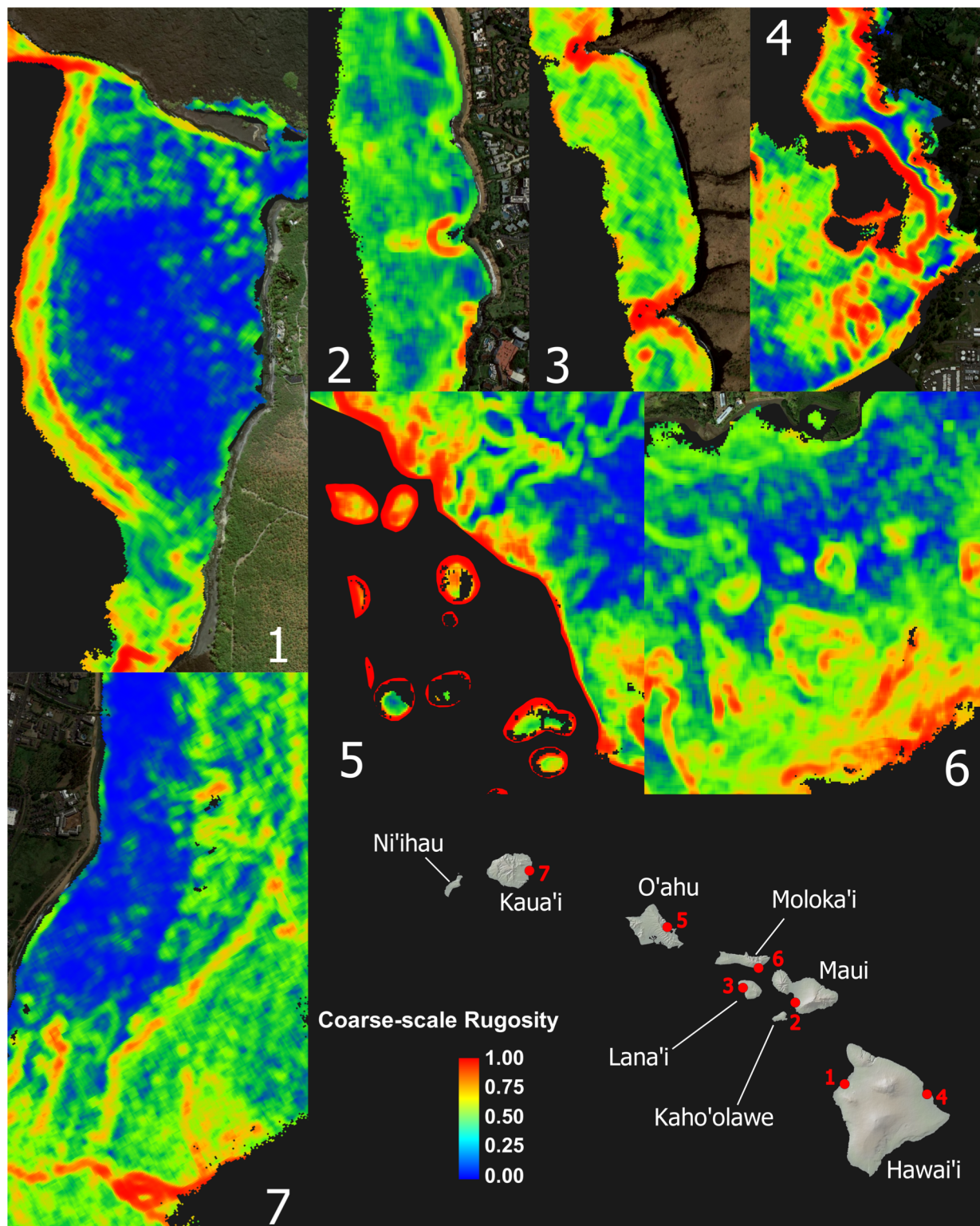


Figure A2. Zoom images from maps shown in Figure 2 demonstrating the information detail in the coarse-scale rugosity data. These seven reefs encompass the range of conditions among high-rugosity sites.

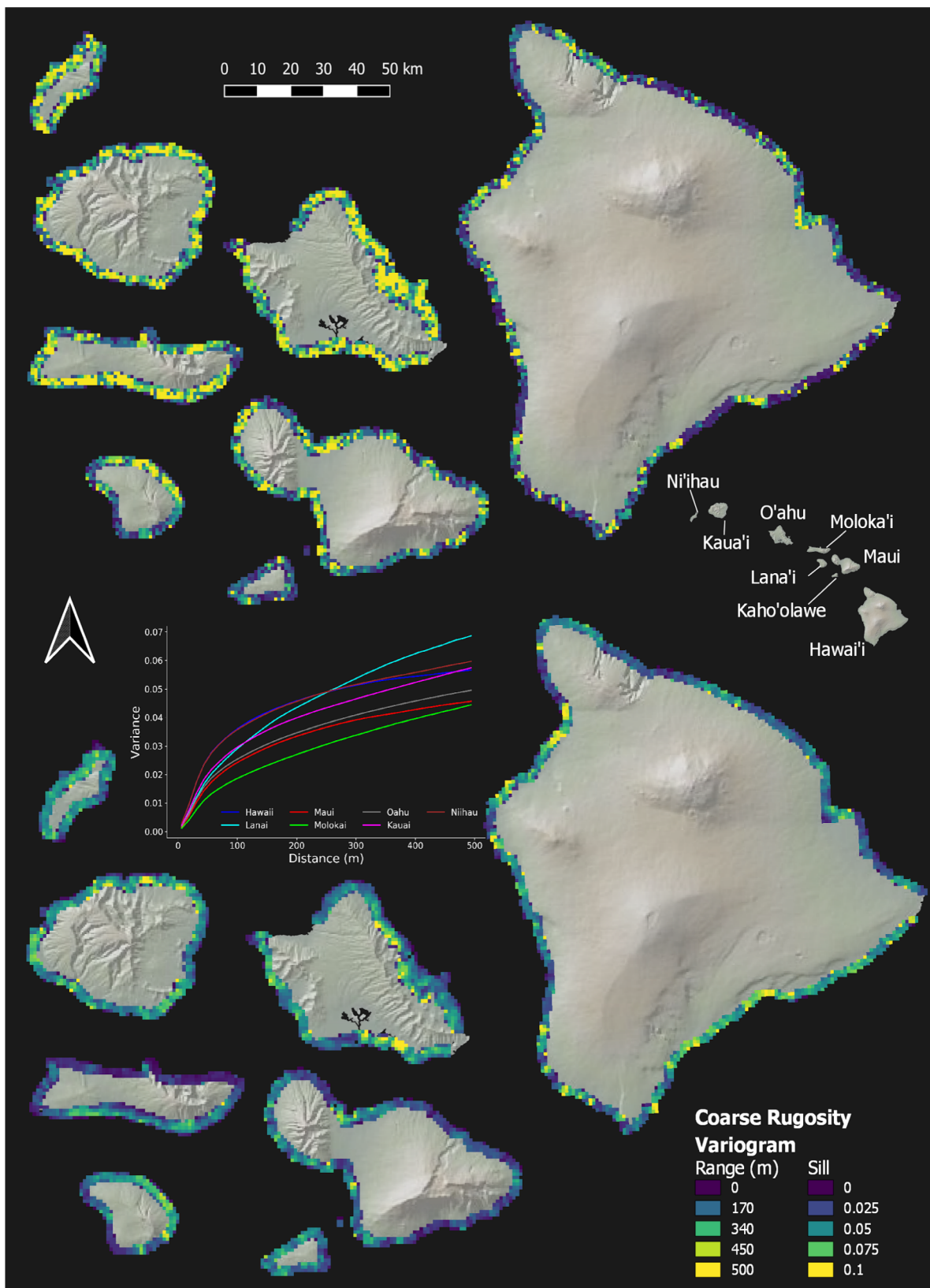


Figure A3. Geospatial variation in coarse-scale rugosity for the eight main Hawaiian Islands. Semi-variogram (a) range and (b) sill are shown at the top and bottom, respectively. (c) Island-scale semi-variograms in the inset graph.

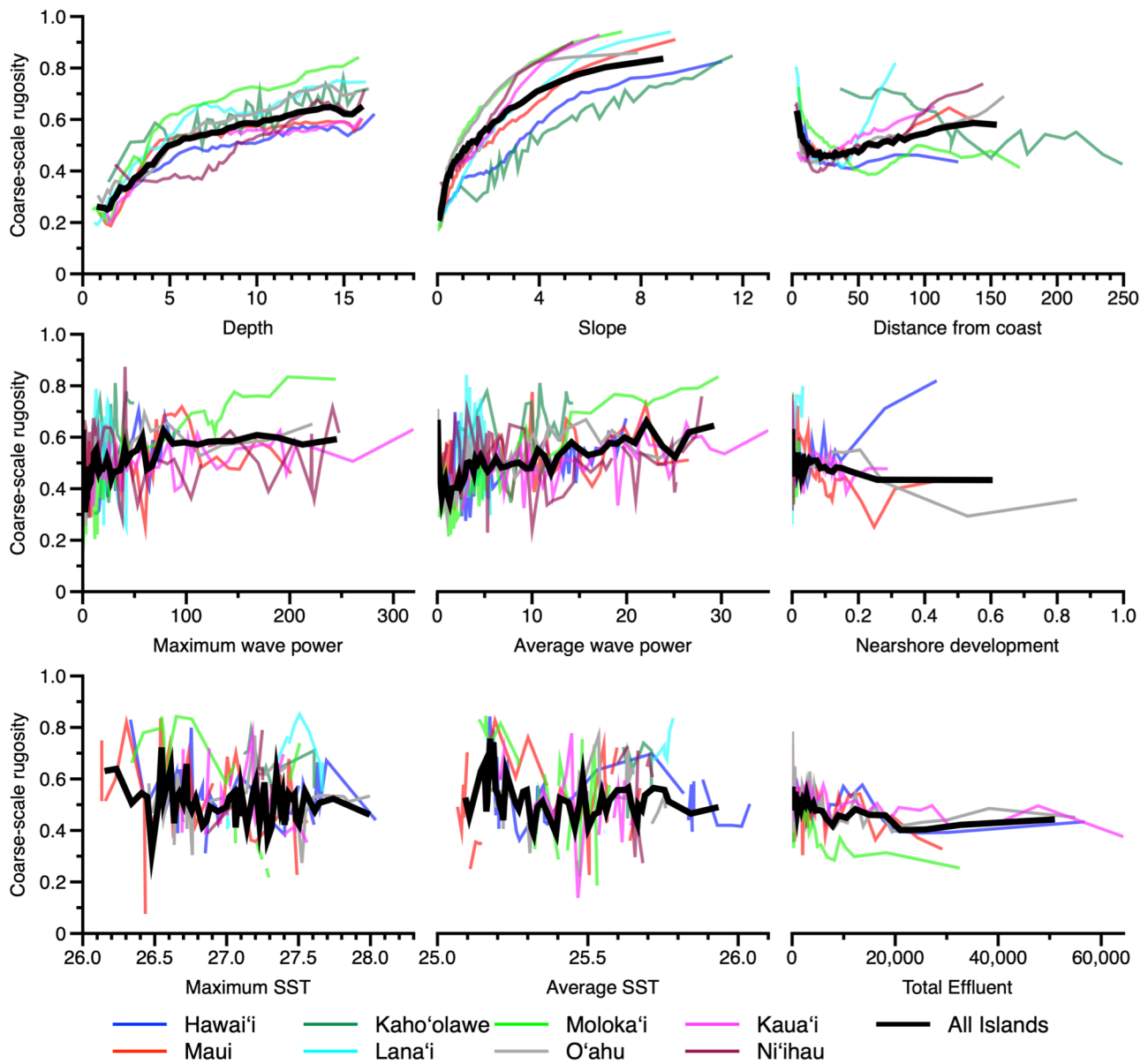


Figure A4. Partial dependence plots indicating the relationship between coarse-scale rugosity and the top nine variables presented in Figure 7 of the main text. Colored lines indicate relationships by island, and thick black lines indicate relationships for all islands combined.